



# Conservation of Sahelo-Saharan fauna & their arid steppe habitats in Tunisia: report on 2024 conservation action and impact

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**Cover photographs:** herd of scimitar-horned oryx in the arid steppe of Dghoumes National Park, Tunisia. Photograph by Marie Petretto, Marwell Wildlife.

## Acknowledgements

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As always, we appreciate the unwavering collaboration and hospitality of our friends and colleagues at the Direction Générale des Forêts (Ministry of Agriculture, Fisheries and Water Resources, Tunisia), and the Commissariats Régionaux au Développement Agricole (CRDA) of Tozeur, Kebili, Medenine, Tataouine, Sidi Bouzid and Gafsa.



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# Together for Wildlife: Health, Connection, and Knowledge in Action

Marwell's Conservation Health Approach

## Foreword

Welcome to Marwell's annual report on our conservation work in Tunisia. For more than 30-years, we've been committed to protecting the country's unique wildlife and landscapes. Since establishing a permanent team on the ground in 2012, we've learned a great deal, adapting our approach as new challenges and opportunities arise.

This report shares both our current projects and our vision for the future. None of this would be possible without the strong partnerships we have built with local communities, NGOs, zoo partners, foundations, universities, and government agencies. Together, we are working not only to protect wildlife, but also to strengthen skills, support local livelihoods, and inspire the next generation of conservationists.

From bringing back the scimitar-horned oryx and protecting threatened desert species, to running wildlife surveys, training park staff, and creating new opportunities for children to connect with nature, we are proud to be working hand in hand with the Direction Générale des Forêts to safeguard Tunisia's extraordinary natural heritage.

### Our Commitments:

Find out more about our charitable activities and conservation impact at:

[www.marwell.org.uk/conservation/achievements/our-achievements](http://www.marwell.org.uk/conservation/achievements/our-achievements)

Where we share highlights of our work to restore nature, promote sustainable living, and help catalyse change for people, animals, and ecosystems in our annual impact report.



# Summary

**2024** was a challenging year with consecutive droughts and illegal hunting impacting population sizes for several species, particularly scimitar-horned oryx. As a result, the estimated population size for scimitar-horned oryx is down from 200 to 145 individuals for the first time and the ostrich population is down from 104 to 62. Slender-horned gazelle and addax populations remained stable. The decline in vegetation across some protected areas was a clear reminder of the fragility of aridland ecosystems, but also their remarkable capacity to regenerate once the rains return.

The population and habitat declines underline the importance of consistent monitoring that detect problems early. During a period of reduced capacity in 2024, following the departure of our two Tunisian Ecologists in December 2023, we reinforced our partnership with the Association Tunisienne de la Vie Sauvage to continue oryx and ostrich monitoring in Dghoumes National Park. Illegal hunting remains a concern there, and Marwell and the Direction Générale des Forêts (DGF) have strengthened anti-poaching activities in the area both through direct anti-poaching patrols but also through community engagement with a schools and nature programme in partnership with the Ecole de la Nature de Branféré and Fondation de France.

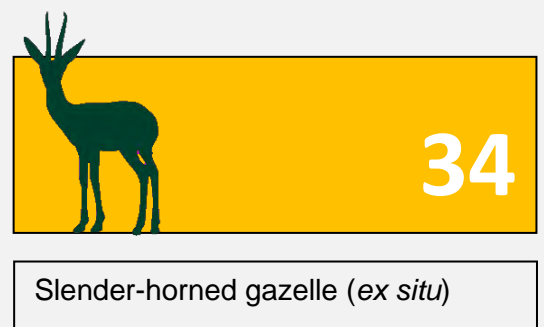
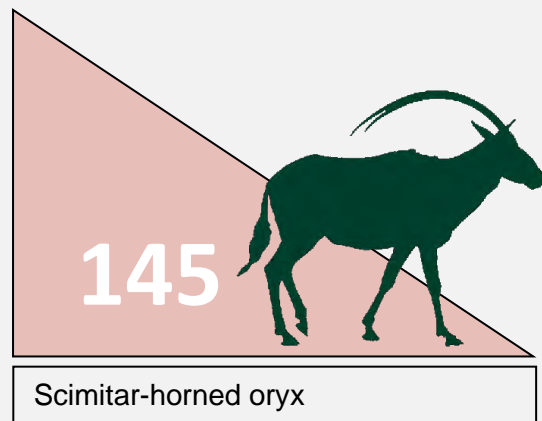
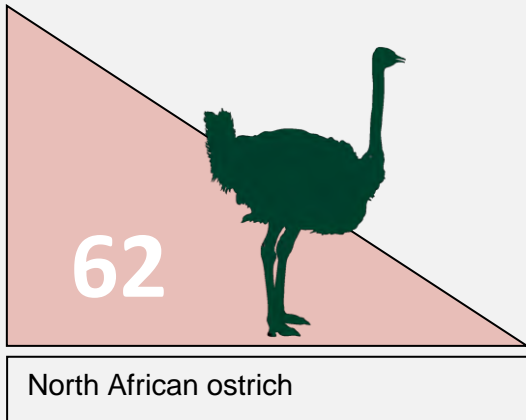
In Sidi Toui National Park, persistent drought reduced habitat quality and natural food availability for scimitar-horned oryx and ostrich. Consequently, animals lost body condition making them more vulnerable to other environmental factors and the population of both species declined. Marwell intervened providing supplemental food for wildlife and management within the protected area has been adjusted. At the same time, we began discussions with the Aridland Institute of Medenine on more detailed habitat assessments and restoration measures for Sidi Toui National Park to improve habitat quality and carrying capacity.

Broader socio-political constraints in Tunisia continue to limit park staffing and resources, but the Direction Générale des Forêts' team, park staff, and our partners consistently demonstrate remarkable dedication, and the strength of our partnerships is key to finding solutions.

We are deeply grateful to all those supporting the conservation in Tunisia. Whilst the situation was particularly challenging in 2024, the progress we made for many species and habitats, and the resulting positive conservation impact, would not have been possible without your continued support. With your help, we remain confident that Tunisia can achieve its conservation goals. Thank You!

# 2024 in Numbers

## Population Estimates







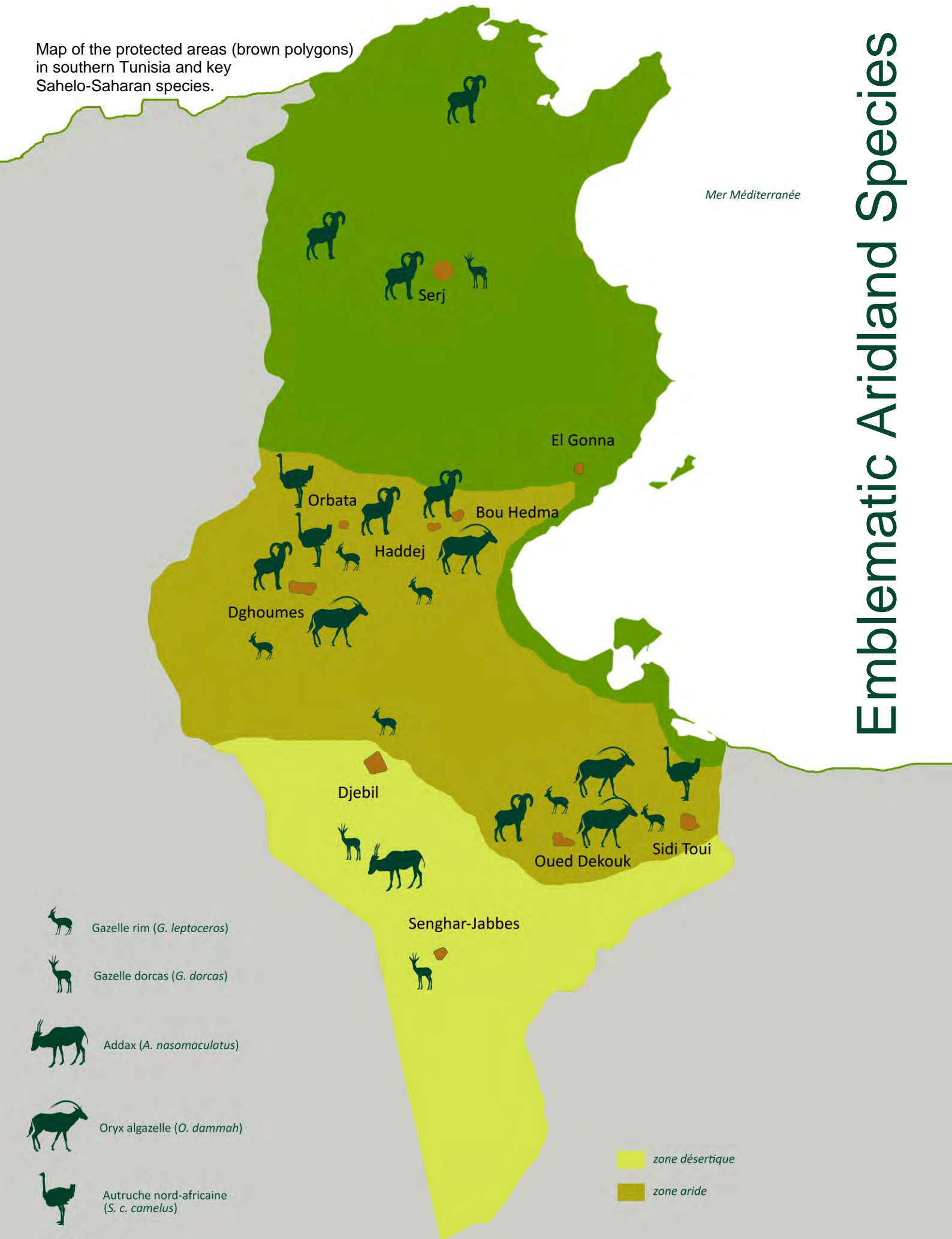
**ABOVE**


A reintroduced Barbary sheep (*Ammotragus lervia*) grazing on acacia in Bou Hedma National Park steppe.





# Emblematic Aridland Species

Map of the protected areas (brown polygons) in southern Tunisia and key Sahelo-Saharan species.





 Gazelle rim (*G. leptoceros*)


 Gazelle dorcas (*G. dorcas*)


 Addax (*A. nasomaculatus*)

 Oryx algazelle (*O. dammah*)

 Aurouchs nord-africaine (*S. c. camelus*)

 Mouflon à manchette (*A. lervia*)

 zone désertique

 zone aride



2022

2023

2024

2025



#### ABOVE

A series of images illustrating the monitoring of the cryptic fennec fox across different years in Senghar-Jabbes NP.

## Conservation in Action:

### Monitoring biodiversity and responding to ecological needs

# 50

Camera-traps  
currently  
deployed

across four  
national parks



#### RIGHT

An image highlighting one of the challenges of camera-trap monitoring: elusive species such as hyenas are rarely recorded, and when they are, photos are often partial or blurry, as seen here in Dghoumes NP.

## Camera-trap Surveys in Tunisia's Aridlands

Remote camera trap monitoring has helped us evaluate biodiversity in Tunisia's aridland ecosystems since 2018. It has generated one of the most comprehensive datasets on desert megafauna in four national parks in the region.

The programme has empowered local park guards - recruited from surrounding communities - to lead camera maintenance and data collection. This not only builds local capacity but strengthens long-term stewardship of these fragile ecosystems.

In 2024, we continued to refine the protocol, maintain devices, and analyse results to support science-led conservation.



# Camera-trap Monitoring in Sidi Toui and Dghoumes National Parks

*Exploring biodiversity patterns and strengthening conservation strategies in Tunisia's aridlands*

**S**idi Toui and Dghoumes National Parks share similar aridland habitats and host reintroduced populations of scimitar-horned oryx and North African ostrich, alongside a rich array of arid-adapted wildlife. Since 2018, long-term camera-trap monitoring - made possible by generous EEP partner support - has provided continuous, systematic biodiversity data across both parks.

In **Dghoumes NP**, cameras continue to help assess the ecological impact of drought and test the value of *tabias* (traditional water bunds) as a novel habitat restoration strategy. Camera-trap data are also informing behavioural analyses of herbivores and their predators, with results now being prepared for publication. The recent re-detection of striped hyena has triggered targeted monitoring, expanding our understanding of predator dynamics in the region.

In **Sidi Toui NP**, a camera-trap grid has produced five consecutive years of high-resolution ecological data, forming an invaluable database on species presence, temporal activity, and interspecies relationships. As the current camera equipment nears the end of its operational life, we are exploring ways to automate data processing using emerging technologies like artificial intelligence, ensuring the long-term sustainability and scalability of monitoring.

This work not only enhances science-based management in these parks but also contributes directly to Tunisia's national conservation strategies and its commitment to international biodiversity agreements. With a technical pause in late 2024, we are now entering a phase of review and knowledge sharing to maximise the impact and accessibility of these findings for conservation stakeholders.

## **V** **BELOW**

African wildcat captured on camera-trap grid, Sidi Toui NP.



# Camera-trap Monitoring in Jbil (Djebil) and Senghar-Jabbes National Parks

## *Uncovering desert biodiversity in Tunisia's most remote ecosystems*

In the vast Saharan landscapes of southern Tunisia, Jbil and Senghar-Jabbes National Parks provide unique opportunities to understand how the desert supports wildlife and responds to conservation efforts.

We concluded our systematic camera-trap monitoring in Jbil NP in December 2023 but left some cameras in place to opportunistically capture wildlife photos and videos. Since 2023 we have focused efforts on Senghar-Jabbes NP, further in the South, marking an important expansion of our work in the Grand Erg Oriental. This large, remote, and previously understudied park plays a strategic role in the long-term conservation planning for species such as addax and slender-horned gazelle. Early results have documented the presence of reintroduced addax, fennec and Rüppell's foxes, wolves, hares, hedgehogs, and a variety of small mammals, along with several bird species including owls. Camera traps have also detected occasional incursions by feral dogs that pose a risk to wildlife, likely linked to nearby military installations, highlighting the need for continued monitoring.

We aim to maintain the camera-trap grid in Senghar-Jabbes NP and continue comparative analysis with Jbil NP. This work will deepen our understanding of biodiversity patterns, ecosystem resilience, and species-specific conservation needs within the heart of the Sahara.

### **V** **BELOW**

Rare photo of a male addax and Rüppell's fox at a camera-trapped water point, Senghar-Jabbes NP.





# Population and Habitat Monitoring

## *Tracking ecosystem health to guide conservation action*

**M**onitoring wildlife populations and their habitats is the foundation of our conservation work in Tunisia. Together with the Direction Générale des Forêts (DGF) and national park managers, we have built a system of continuous surveillance across key protected areas. We encountered challenges in fully implementing this in 2024 as our Ecologists moved away from Tunisia for new jobs, but we are in the process of employing a new field assistant to re-invigorate the monitoring programme. The monitoring is essential as it helps provide early warning signals of stress - such as prolonged droughts or declining vegetation - which can have severe consequences for antelope, gazelle, and ostrich living in isolated metapopulations.

To ensure these populations remain viable in the long term, it is now crucial to invest in research that evaluates and predicts changes in resource availability. By better understanding how food and water resources fluctuate under climate change, we can develop proactive management strategies rather than relying only on emergency interventions. This knowledge will help safeguard iconic species while strengthening ecosystem resilience.

**V**

**BELOW**

Oryx monitoring by trained park staff in Dghoumes NP.



# Emergency Food Provision During Critical Periods

## *Safeguarding wildlife through climate extremes*

In recent years, Tunisia has suffered prolonged droughts, placing unprecedented stress on wild herbivores. In response, Marwell and its partners have provided supplementary food when natural resources were insufficient to support acceptable animal welfare. These interventions were undertaken in close consultation with Tunisian authorities. Such emergency measures demonstrate the importance of long-term monitoring and research.



**ABOVE**

Supplementary food provided to addax in Senghar-Jabbes NP.



# Empowering Partnerships for Impact:

Strengthening collaboration and local engagement

From student to partner:

how ATVS is shaping Tunisia's conservation future



▲

#### ABOVE

Faouz Kilani, Housseem Ben Othmen (ATVS) and Boudhief Yahyaoui (Dghoumes NP) presenting the new monitoring support provided to the guards.

## Partnering with the Association Tunisienne de la Vie Sauvage (ATVS) to Build Capacity

*Supporting a new generation of Tunisian conservation leaders*

For the second consecutive year, Marwell Wildlife has formalised a collaboration agreement with the Association Tunisienne de la Vie Sauvage (ATVS), a growing Tunisian NGO dedicated to biodiversity conservation through research, awareness, and education. We are especially proud to see this organisation led by former volunteers and students who once trained with us, and who have now emerged as professional partners in the field of conservation.

Through this partnership, ATVS has taken on responsibility for population monitoring of scimitar-horned oryx at Dghoumes NP and has delivered training for teams of park guards, strengthening local capacity for biodiversity management. Their work represents a powerful example of how local expertise, supported by international collaboration, can generate durable conservation outcomes.

We look forward to our continuing partnership with ATVS.

▼

#### BELOW (From left to right, top to bottom)

Housseem Ben Othmen (ATVS), Laura Read (CEO, MW), Philip Riordan (Director of Conservation, MW), Ross Brown (Animal team manager, MW), Wael Ben Aba (ATVS), Faouz Kilani (ATVS), Marie Petretto (Conservation Biologist, MW)







▲

#### **ABOVE**

Volunteers of local NGO 'Friends of Sidi Toui' collecting the rubbish left during the Ziara festival at Sidi Toui NP.

# 375<sub>kg</sub>

of kilograms of  
waste removed

from culturally and  
ecologically  
sensitive areas



## Supporting Grassroots Conservation with the Friends of Sidi Toui *Empowering Local Communities to Protect Their Park*

**S**idi Toui National Park, located in southern Tunisia near the Libyan border, protects arid sub-desert habitats once naturally inhabited by scimitar-horned oryx, dorcas gazelles, and North African ostriches. Since the late 1990s, reintroduction programmes have re-established populations of these species within the park. Beyond its ecological significance, however, Sidi Toui also holds deep cultural importance: the site hosts 18 marabouts (tombs of revered holy men), and every October it welcomes thousands of pilgrims from Tunisia, Libya, and Algeria for the annual Ziara.

While the Ziara is an important cultural event, it also poses significant challenges for conservation managers. The influx of visitors, many of whom come from rural communities far from the region, impact the wildlife in the park by causing disturbance and leave large quantities of waste behind. Plastic bags, ropes, and other refuse are especially problematic, while the gathering also carries a biosecurity risk to the park's naïve wildlife populations.

In 2024, Marwell Wildlife and our long-standing partner, the Institut des Régions Arides de Médenine, financially supported a new grassroots organisation, the Friends of Sidi Toui, based in the nearby town of Ben Guerdane. The Friends of Sidi Toui launched a community-led clean-up and awareness campaign during the Ziara. This initiative not only alleviated pressure on the park management team but also engaged local communities directly in conservation action. By promoting a participatory approach to park management, the campaign helped shift perceptions of the event from being a source of ecological strain towards an opportunity for stewardship and shared responsibility.



Encouraged by the success of this pilot project, we aim to renew and expand the initiative in future years, strengthening community involvement and ensuring that cultural heritage and biodiversity conservation can thrive side by side at Sidi Toui NP.

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### LEFT

Gathering of pilgrims at the Marabout of Hawach in Sidi Toui NP (photo credit: Friends of Sidi Toui)





**Marwell working with the DGF to reduce poaching and monitor oryx in Dghoumes NP**

## Enhancing Anti-poaching Efforts in Dghoumes National Park

### *Strengthening Protection Through Patrols and Community Engagement*

**D**ghoumes National Park holds a special place in Marwell's history, as it is the most recent location of scimitar-horned oryx reintroduction. Today, we are proud to witness a restored ecological community and a thriving natural diversity in the park.

Yet, with the return of wildlife, new challenges emerge. Poaching of scimitar-horned oryx, dorcas gazelles, and Barabary sheep remains a significant threat to the long-term success of the conservation efforts. To respond, Marwell has reinforced its support to the park authorities and guardians.

In 2024, we provided a dedicated 4x4 vehicle to enhance patrolling capacity, ensuring that guards can better protect vulnerable species across the park's vast terrain, including in the mountains. Alongside this, we launched an environmental education project with schools and citizens from the nearby village of Dghoumes, transforming them into active partners in the promotion and protection of their natural heritage.

By combining stronger law enforcement with community-based awareness, our efforts aim to secure the hard-won gains in biodiversity recovery and to foster a shared sense of responsibility for safeguarding Tunisia's wildlife.







▲

**ABOVE**

Group of *ex situ* slender-horned gazelles in Sidi Toui NP.



# Focus on Slender-Horned Gazelle Conservation

Species recovery through infrastructure and training

## Creation of New *Ex Situ* Facilities in Sidi Toui National Park

In recent years, further evidence has emerged that slender-horned gazelles (*Gazella leptoceros*) are under increasing threat in the wild. The last confirmed population in the Grand Erg Oriental, spanning southern Tunisia and Algeria, is likely even smaller than we thought.

To support the species' recovery, the Tunisian government has established two *ex situ* management centres: one in Sidi Toui National Park and one in El Gonna National Reserve. These centres were founded using wild-caught animals, confiscated gazelles from illegal private holdings, and two females donated by Planckendael Zoo (Belgium) in 1999.

Throughout 2024, Marwell Wildlife focused on monitoring and providing management advice and veterinary support to enhance the welfare and husbandry of the slender-horned gazelles in these centres.



V

**BELOW**

Gazelle breeding facilities at El Gonna NR.





We also constructed five new enclosures in Sidi Toui NP that will allow the herd to be split into functional and safe breeding groups. Two additional enclosures are planned for 2025 to further improve population management and safeguard animal welfare. The enclosures include separate “bachelor” areas for young males, minimising disruption and supporting effective breeding.

International partners have been critical to the success of this programme. Planckendael Zoo, the last European zoo to house slender-horned gazelles, has provided not only financial support but also expertise in husbandry and breeding management. Their contribution, alongside support from Fossil Rim Wildlife Center (USA), is vital to safeguard this important population for future potential reintroductions into the wild.

V

#### BELOW

Four of the five new breeding units for the slender-horned gazelles built inside an old enclosure at Sidi Toui NP.

Thanks to this combined effort, Sidi Toui National Park now hosts a thriving *ex situ* population of 30 gazelles, providing a foundation for the long-term conservation of this endangered species.







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**ABOVE**

Marwell's keepers setting a capture corridor during gazelle-handling training at El Gonna NR.



# Field Training by Marwell Wildlife's Team for Tunisian Wildlife Keepers

*El Gonna NR, October 8 – 10, 2024*



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## LEFT

An *ex situ* dorcas gazelle identified with ear tag at El Gonna NR.

**E**l Gonna NR is home to dorcas gazelles and a group of four male slender-horned gazelles. As part of Tunisia's national programme to safeguard the slender-horned gazelle, Marwell Wildlife, in collaboration with the DGF and the Commissariats Régionaux au Développement Agricole (CRDA) of Sfax and Médenine, led a three-day practical management and training mission in October 2024. Fourteen Tunisian forestry officers and veterinarians joined the hands-on sessions, supported by Marwell's veterinary and animal management teams.

During the training, dorcas and slender-horned gazelles were safely captured, ear-tagged, microchipped, and sorted into small breeding groups to improve husbandry and record-keeping. Veterinary staff practised safe handling techniques, sedation, health screening, and blood sampling for genetic analysis, while recommendations were made for enclosure management, feeding regimes, and infrastructure improvements to enhance welfare and breeding success.

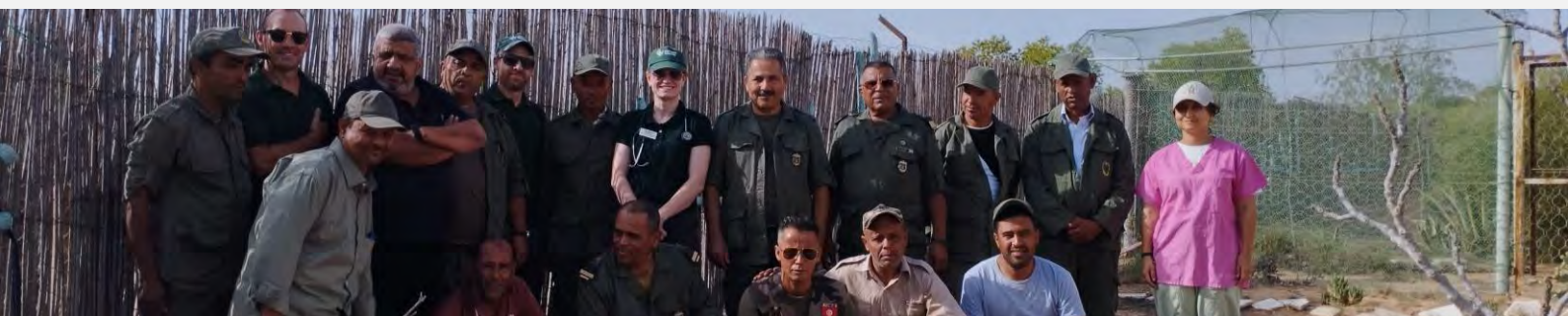
The sessions not only strengthened participants' practical skills but also reinforced collaboration between regional forestry teams and Marwell Wildlife, contributing directly to Tunisia's National Conservation Strategy. Building on its success, the training will be replicated at Sidi Toui NP in 2025. El Gonna NR and Sidi Toui NP are now recognised as key facilities for the management of slender-horned and dorcas gazelles, including the reception of any individuals confiscated or rescued in future.

This initiative has built vital local capacity in wildlife veterinary practice and husbandry, improving gazelle management, animal welfare, and preparing the ground for future conservation actions and translocations.

V

## BELOW

Group photo of Marwell's team and park staff at El Gonna NR.







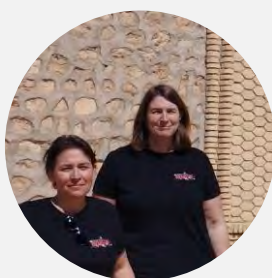
#### ABOVE

Group picture of a class of school children at Dghoumes school with Karine De Kindt (ENB), Mr. Abdelmalek Othmani (Dghoumes School director) and Laetitia Labeyrie (ENB's director).



# Inspiring the Next Generation:

Education, research, and capacity for future conservation



**ABOVE**

Karine De Kindt (right), Laetitia Labeyrie (left) from the École de la Nature at Parc de Branféré (ENB)

## "Children and Nature"

### *Launch of an environmental education initiative*

In 2024, Marwell Wildlife, in partnership with the École de la Nature (ENB) at Parc de Branféré (France) and with the support of the Fondation de France through its 'Resilient Ecosystems' programme, launched the "Enfants & Nature" project in Tunisia. Focused on the communities neighbouring Dghoumes and Bou Hedma National Parks, the initiative aims to reconnect children with their natural heritage and foster a lasting sense of responsibility for biodiversity.

The project's first months laid important foundations: engaging national and regional authorities, formalising collaboration with the École de la Nature, and holding co-design workshops with teachers in Dghoumes. These steps initiated the development of an innovative educational toolkit – the "nature backpack" – and the reimagining of local ecomuseums as interactive, hands-on learning spaces.

This launch represents a significant milestone in embedding environmental education within local schools and nurturing the next generation of environmental stewards for Tunisia's fragile arid ecosystems.

Fondation  
de  
France



Les échantillons végétaux ont été analysés selon les procédures de...



Analyses chimiques.

54





# Supporting a Tunisian PhD Student Through to Graduation

## *Launch of an environmental education initiative*



### ABOVE & PREVIOUS PAGE

Marouane Louhichi,  
PhD student  
completing his PhD  
(Photo credit: Aridland  
Institute).

In 2024, Marwell Wildlife strengthened its commitment to science-based conservation by supporting doctoral research at the Aridland Institute of Medenine. Through a research agreement, Marwell shared our long-term camera-trap data from Sidi Toui NP with PhD candidate Marouane Louhichi, enabling the completion of his thesis:

“Home ranges, feeding ecology and behaviour of the Scimitar-horned oryx (*Oryx dammah*) and the Dorcas gazelle (*Gazella dorcas*) in Sidi Toui National Park, Tunisia” (Speciality: Terrestrial Wildlife Ecology, defended on 10 October 2024).

The study showed that the two species - one reintroduced (oryx) and one extant species (gazelle) - successfully coexist by using different habitats and food resources. These findings provide concrete guidance for the management of multi-species antelope populations in arid ecosystems and highlight the potential for restored communities to thrive if carefully monitored and supported.

This collaboration not only contributed to a successful PhD defence but also resulted in two peer-reviewed scientific publications, placing Tunisia’s conservation research on the international stage. By investing in young scientists and applied research, Marwell and our partners are helping to build national expertise while generating knowledge that directly informs the future of threatened antelope conservation in North Africa.

#### Publications:

Louhichi, M., Khorchani, T., Petretto, M., Eifler, D., Eifler, M., Dadi, K., ... & Chammem, M. (2024). Spatiotemporal Mechanisms of the Coexistence of Reintroduced Scimitar-Horned Oryx and Native Dorcas Gazelle in Sidi Toui National Park, Tunisia. *Animals*, 14(10), 1475.

Louhichi, M., Khorchani, T., Eifler, D., Eifler, M., Orton, M., Dadi, K., ... & Chammem, M. (2024). Modelling habitat suitability of reintroduced scimitar-horned oryx (*Oryx dammah*) in Sidi Toui National Park, Tunisia. *Journal Of Oasis Agriculture And Sustainable Development*, 6(02), 1-13.

# Collaborative Insights:



## Integrating Veterinary Expertise into Conservation Practice

**M**arwell continues to work closely with the DGF to develop sustainable solutions for wildlife management in Tunisia's protected areas. This joint effort includes ecological monitoring, behavioural studies, threat mitigation, team building, community engagement, and strengthening veterinary expertise.

While Tunisia benefits from a strong base of medical and scientific knowledge, challenges remain in connectivity, knowledge exchange, and resource availability. In 2024, a major step forward was achieved with the signing of a Memorandum of Understanding between the DGF and the Centre National de Veille Zoosanitaire (CNVZ, National Center for Zoosanitary Surveillance). This institution, responsible for monitoring, preventing, and controlling animal diseases, will play a key role in mobilising expertise whenever urgent situations arise.

This collaboration was immediately put to the test at the end of 2024, when unusually high mortality rates were recorded among oryx, ostriches, and gazelles. A national commission was rapidly convened, bringing together veterinarians from the CNVZ, state veterinary services (DGSV), the Veterinary Research Institute of Tunis, the Aridland Institute of Medenine, the National Veterinary School, the Zoo of Friguia, and Marwell Wildlife. The collective expertise enabled swift diagnosis and intervention before the crisis escalated further.

This emergency occurred against the backdrop of a prolonged and severe drought from 2017 to 2023, with 2023 one of the driest years on record. Water reservoirs dropped to just 25–30% of their capacity, leading to government-imposed restrictions such as nightly water cuts and quotas. Beyond its socio-economic impact, this acute water shortage placed enormous pressure on wildlife and natural ecosystems, compounding habitat degradation and highlighting Tunisia's vulnerability to climate change.

Despite expectations of recovery, by the summer of 2024 many animals were too weakened to survive without intervention. Emergency measures were therefore implemented, including the provision of supplementary food, water, minerals, and vitamins, ensuring that all actions followed the best standards of wildlife management and ethics and under the guidance of the new national commission.

Looking ahead, discussions have begun with colleagues at the Aridland Institute of Medenine to better understand changes in resource availability across national parks, with the goal of developing longer-term strategies to safeguard wildlife resilience in the face of climate change.





#### **ABOVE**

Group of North-African ostriches roaming together with scimitar-horned oryx in Sidi Toui NP.

# Global Engagement and Local Impact

Marwell's international role and charitable contributions in 2024



## Participation in International Conferences and Sharing Expertise

In 2024, Marwell actively shared its expertise and conservation experience with the global community through participation in several major international events. We contributed to the Sahelo-Saharan Interest Group Meeting in Agadir, Morocco (May), where regional partners exchanged knowledge on aridland species recovery. In February, we participated to the Convention on Migratory Species COP14 in Uzbekistan and in October, we joined the EAZA Annual Conference, held in Leipzig, Germany, strengthening collaboration with European zoos on *ex situ* and *in situ* conservation programmes. Philip Riordan (Director of Conservation), Tania Gilbert (Head of Conservation Science), Marie Petretto (Conservation Biologist) and Sophie Whitmore (Zoologist) are our key ambassadors: feel free to reach out to them!

Through these international platforms, Marwell continues to exchange knowledge, celebrate successes, and build partnerships that strengthen conservation impact both in Tunisia and worldwide.

**RIGHT**  
Marie Petretto presenting an updated overview of Marwell's charitable activities in Tunisia at the Annual SSIG conference, Agadir (Morocco).





# Looking Ahead:

**A**s we look towards 2025–2026, Marwell will continue to build on the foundations laid in recent years while addressing urgent needs for species, habitats, and communities in Tunisia.

Proposed activities for 2025–2026 will focus on consolidating our presence in the field and expanding our capacity to deliver meaningful conservation outcomes. A key priority will be to complete the slender-horned gazelle facilities by building and modifying enclosures, ensuring secure and suitable conditions for the management of this endangered species. Alongside this, we will strengthen our education and outreach work by providing schoolchildren with learning materials, support community events, and enhance the role of local ecomuseums as hubs for awareness and cultural engagement. To sustain our field activities across multiple sites, we will also employ a new field assistant who will play an essential role in wildlife monitoring, data collection, and liaison with local partners.

## Slender-horned Gazelle Conservation

One of our priorities is safeguarding the slender-horned gazelle, a species on the brink of extinction in the wild, by strengthening *ex situ* management in Sidi Toui NP and El Gonna NR. This includes building new enclosures, improving animal welfare, delivering training and learning opportunities, and maintaining genetic diversity through population management — critical steps for potential future conservation translocations.

We also plan to contract and train a local veterinarian to provide routine care and respond to emergencies, to build local capacity and ensure the sustainability of the project. International experts will remain available to offer remote guidance and technical advice when needed.

In parallel, we plan to assess wild gazelle populations and habitats in the Grand Erg Oriental, to evaluate threats and support local grass roots associations in their conservation efforts.

## Biodiversity Surveys

Our long-term biodiversity and habitat monitoring will continue in 2025–2026, though camera trapping efforts will gradually scale back as many sites now have over five years of data. However, we plan to maintain existing camera-traps, support park staff in biodiversity monitoring, and analyse and consolidate results. These datasets will be finalised and shared to guide conservation management in Tunisia and beyond. We will start exploring emerging technologies to manage and analyse these data to provide a valuable resource for future research and evidence-based decision-making.

## Education and Community Engagement

We have identified a clear need to strengthen environmental education and community engagement around Bou Hedma and Dghoumes National Parks. Both parks host ecomuseums that welcome local and international visitors and have great potential to connect schoolchildren with the natural heritage surrounding them. While partially equipped, the ecomuseums require updated materials and activities to fully realise this potential and inspire lasting changes in attitudes toward nature. In 2025–2026, we plan to work closely with schools and local communities to facilitate park visits, maintain and enhance the ecomuseums, and secure two local engagement officers to coordinate outreach. Generous support from Fondation de France provides a core budget, but additional funding and partnerships are needed to expand educational activities, keeping these hubs active, dynamic, and impactful.



## Local Capacity Development

We will continue to strengthen our partnership with the Association Tunisienne de la Vie Sauvage (ATVS), whose expertise and dedication have been vital to our recent conservation efforts. This ongoing collaboration will reinforce existing projects, build local capacity, and support new initiatives to protect Tunisia's biodiversity and habitats.

We also plan to expand support to other emerging local associations in key sites, including Dghoumes, Sidi Toui, and Jbil National Parks. In parallel, we will maintain peer-to-peer training for park staff and provide internship opportunities for Tunisian ecology and veterinary students, helping to enhance skills in wildlife conservation and veterinary medicine across the country.

## Continued Monitoring of Key Aridland Species in Tunisia

In 2025, we will maintain close collaboration with park managers, guards, and local associations to monitor populations of key aridland species across Tunisia's protected areas. These monitoring activities form the backbone of our conservation work, providing essential data to support informed decision-making by park managers and the DGF. Following the departure of Khalil Meliane and Amira Saidi, we will recruit a new field assistant for 2025 to strengthen our local team and maintain engagement across all eight protected areas in southern Tunisia.

Since the first reintroduction of scimitar-horned oryx in 1985, with the last release in 2007, the Tunisian metapopulation has likely experienced a decline in genetic diversity. We aim to reassess the genetic diversity of the scimitar-horned oryx population and identify targeted management actions to enhance its long-term viability.



### ABOVE

An African golden wolf (*Canis anthus*) in Bou Hedma NP.

# Funding Proposal

The annual costs of operations in Tunisia are underwritten by Marwell Wildlife, maintaining our presence in-country and ensuring the continuity of work that is essential for long-term success. We have the opportunity and ability to build on our work and enhance conservation impact and are seeking funding for the delivery of projects. Hence, we would very much welcome the support from partners who share our goals of achieving sustainable conservation in North Africa. By supporting local development and promoting the motivation and the skills of the next generation of Tunisian ecologists, our programme could provide great and inspiring stories to emphasise the contribution of the partners of our work.

## £5,000

to build one enclosure  
for a slender-horned  
gazelle breeding group



## £450

to support the  
expenses to train  
one Tunisian  
ecology student



Cost item	Cost basis	£
<b>Slender-horned gazelle <i>ex situ</i> centre in Sidi Toui NP and El Gonna NR</b>		
Tagging the gazelles, building a national studbook and training the staff in El Gonna NR and Sidi Toui NP (Population management & animal handling training for staff)	£2,000 per session, 2 per year	4,000
Modifications to gazelle enclosures at El Gonna and Sidi Toui to improve animal husbandry including blind fencing made of palm or reeds	£ 5,000 per site – 2 sites	10,000
Translocating gazelles from Sidi Toui NP to El Gonna NR	£600 per crate x 6 crates. Mileage, veterinary care, health checks	5,600
Food provision	£4 per 25kg-bale of hay, ~1,5 bale/day £100 per 50kg pellets, ~30bags/year	2,190 2,700
Veterinary prevention and emergency care	£400 per month for routine check + av. £30/mo: vaccines, consumables	5,160
Public engagement signage	Sidi Toui NP and El Gonna NR	3,000
<b>TOTAL</b>		<b>32,650</b>
<b>Standardised oryx, addax, North African ostrich and biodiversity monitoring</b>		
Partnering with local NGOs (ATVS) to monitor key species & increased capacity in Tunisia	£700 per month (ATVS fees & expenses), 12 months	8,400
Tunisian field assistant fees	£750 per month, 12 months	9,000
Monitoring protected areas by Marwell team	Mileage: 1500km/mo @ 0.36p per km Food: 8d/mo @ £7/d	6,480 672
Training and skill development for protected area staff	3 training events, totalling 15 days @ £600/event	1,800
Batteries	8 batteries/camera, 4 times a year, 40 cameras @ £0.5/batt	640
Small equipment for protected area staff	e.g. Binoculars, camera, camera traps	4,000
Internship support for Tunisian students (food, accommodation, transport, material and logistics)	X2 ecology students a year	1,500
<b>TOTAL</b>		<b>32,492</b>



£500

covers the cost of 4-  
fieldwork days in  
Dghoumes NP



£100

Pays for a veterinary  
visit and analyses in  
a remote protected  
area



Cost item	Cost basis	£
<b>Integrated wildlife &amp; livestock health monitoring</b>		
Emergency care, diagnosis and management of antelope and ostrich	Estimated: 5 oryx, 5 addax, 2 ostrich per year, @ £60 per animal (drugs, consumables)	720
Sampling and analyses	parasitology, histology, serology etc.+ storage and shipping @ £50/animal, estimated 20 individuals per year	1,000
TOTAL		<b>1,720</b>
<b>Anti-poaching patrols</b>		
Fuel for daily patrols in Dghoumes National Park	£75 per month	900
Vehicle maintenance & registration	£500 per year	500
Small equipment including binoculars	£300 per year	300
TOTAL		<b>1,700</b>
<b>Grassroots organisation support</b>		
Friends of Jbil – establishment of an office	Equipment, rent, furniture, awareness raising	3,000
Friends of Sidi Toui – environmental awareness including removing waste from Sidi Toui after the festival	Awareness campaign and waste removal	1,000
Dghoumes cultural society	Awareness campaign	1,000
TOTAL		<b>5,000</b>
<b>Overall Total</b>		<b>£ 73,562</b>



For more information, please visit  
[www.marwell.org.uk/conservation](http://www.marwell.org.uk/conservation)

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